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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/690,673 | 10/16/2000 | Arthur James Neufeld | QCPA000128 | 3260 |

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Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

EXAMINER

FERGUSON, KEITH

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2683

DATE MAILED: 04/23/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/690,673

Applicant(s)

NEUFELD, ARTHUR JAMES

Examiner

Keith T. Ferguson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,11,21 and 22 rejected under 35 U.S.C. 102(e) as being anticipated by Shohora et al..

The claimed invention reads on Shohora et al. as follows:

Regarding claims 1,11,21 and 22, Shohora et al. discloses a method/Wireless Communications Device (WCD)/computer program product with reduced power consumption (col. 10 lines 35-38), the WCD operating in sleep and awake modes during monitoring of a slotted paging channel (col. 20 lines 20-46), comprising: means for providing a plurality of counters (fig. 2 numbers 80,78,88 and 100); means for establishing a roll over point for each

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counter at a predetermined offset relative to each other counter (col. 13 lines 10-15); means for identifying a timing point (S-D-1) for at least one roll over point (col. 13 lines 10-15); and means (controller) for transitioning between the sleep and awake modes during the occurrence of an identified timing point (fig. 2 number 50 and col. 13 lines 49-58)

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-3,5,6,8,10,21 and 22 are rejected under 35 U.S.C. 102(a) as being anticipated by Easton et al. (WO 00/04738).

The claimed invention reads on Easton et al. as follows:
Regarding claims 1,11,21 and 22, Easton et al. discloses a method of reducing average power consumption in a wireless communication device (WCD) (page 4 lines 21-31), the WCD operating in sleep and awake modes during monitoring of a slotted paging channel (page 5 lines 21-31), comprising: providing a

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plurality of counters (fig. 1 numbers 203,224,208); establishing a roll over point for each counter at a predetermined offset relative to each other counter (page 6 line (page 6 lines 10-37); identifying a timing point for at least one roll over point (page 6 lines 17-22); and a controller (microprocessor) that transitioning between the sleep and awake modes during the occurrence of an identified timing point (page 6 line 38 through page 7 line 10).

Regarding claims 2 and 12, Easton et al. discloses spacing each of the plurality of counters at substantially equal time increments around a PN sequence period (page 9 line 17-23).

Regarding claims 5 and 15, Easton et al. discloses the controller commencing awake mode operation at a predetermined number of timing points before the beginning of a paging channel slot assigned to the WCD (page 8 line 21-24).

Regarding claims 6 and 16, Easton et al. discloses the controller commencing sleep mode operation at a predetermined number of timing points after the beginning of a paging channel slot assigned to the WCD (page 8 line 25-28).

Regarding claims 8 and 18, Easton et al. discloses the controller commencing sleep mode operation at a first occurring timing point after the WCD determines there is no paging traffic to decode during a paging channel slot assigned to the WCD (col. 6 line 37 though page 7 line 4).

Regarding claims 10 and 20, Easton et al. discloses in accordance with IS-95 (page 6 line 4).

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3,4,13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easton et al. in view of Naruse.

Regarding claims 3,4,13 and 14, Easton et al. discloses a method as discussed supra in claims 1 and 11. Easton et al. differs from claims 3,4,13 and 14 of the claimed invention in that it do not disclose synchronizing each of the plurality of counters to a corresponding pseudonoise (PN) sequence generator and shifting each of the corresponding PN sequence generators by an offset, thereby enabling the demodulation of a corresponding multipath transmission component. Naruse teaches synchronizing each of the plurality of counters to a corresponding pseudonoise (PN) sequence generator (col. 4 lines 47-60 and col. 8 lines 1-14) and shifting each of the corresponding PN sequence generators by an offset (col. 6 lines 37-44), thereby enabling the demodulation of a corresponding multipath transmission component (col. 6 lines 37-44). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made provide Easton et al. with synchronizing each of the plurality of counters to a corresponding pseudonoise (PN) sequence generator and shifting each of the corresponding PN sequence generators by an offset, thereby enabling the demodulation of a corresponding multipath transmission component in order to synchronize with base station by going into the sleep mode which saves electric power in the portable telephone when waiting for a message, as taught by Naruse.

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7. Claims 7,9,17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Easton et al. in view of Banister.

Easton et al. discloses a method as discussed supra in claims 1 and 11. Easton et al. differs from claims 7 and 17 of the claimed invention in that it do not disclose commencing awake mode operation two timing points before the beginning of a paging channel slot assigned to the WCD. Banister teaches commencing awake mode operation two timing points before the beginning of a paging channel slot assigned to the WCD (fig. 3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Easton et al. with commencing awake mode operation two timing points before the beginning of a paging channel slot assigned to the WCD in order allow the portable telephone to warm up and calculate its wake up time, as taught by Banister.

Regarding claims 9 and 19, Easton et al. discloses a method as discussed supra in claims 1 and 11. Easton et al. differs from claims 9 and 19 of the claimed invention in that it do not disclose the slotted paging channel carries code division multiple access (CDMA) signals. Banister teaches the slotted paging channel carries code division multiple access (CDMA) signals (col. 4 line 35-39). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide Easton et al. with slotted paging channel carries code division multiple access (CDMA) signals in order for the portable telephone to monitor a specific time slot for messages, as taught by Banister.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roberts et al. (U.S. Patent 6,212,398) discloses a wireless telephone that rapidly requires a timing reference from a wireless network after a sleep mode. Challa et al. (U.S. Patent 6,453,181)

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discloses compensation for frequency drift in a low frequency sleep clock within a mobile station operating in a slotted paging mode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

Keith Ferguson *KF*
Art Unit 2683
April 9, 2003


WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600